



Hewlett Packard
Enterprise

HPE Cloud Optimizer

Software Version: 3.01
Linux operating system

Release Notes

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HPE Cloud Optimizer Release Notes

for the Linux operating system

Software version: 3.01

Publication date: April 2017

HPE Cloud Optimizer is a web-based analysis and visualization tool that analyzes performance trends of elements in virtualized environments. It enables virtualization monitoring by providing an overview of the environment, near-real-time and historical data analysis and triaging using an interactive dashboard. It also enables monitoring for cloud and hypervisor environments. HPE Cloud Optimizer helps you visualize performance data for elements in the context of each other to rapidly analyze bottlenecks. HPE Cloud Optimizer provides performance monitoring, graphing, and reporting in a single interface.

Some of the key features of HPE Cloud Optimizer are as follows:

- Triage analysis with the Workbench and capability to trend server utilization across days, weeks, and a month.
- Analyze the capacity, usage, and allocation trends for various resources in a virtualized environment.
- Right sizing recommendation based on historical resource utilization and reclaiming unused resources.
- Predict the impact of business initiatives.
- Determine the impact of adding or deleting the resources in your environment to proactively plan your hardware requirements.

Note: HPE Cloud Optimizer supports the VMware vCenter Server versions 5.0, 5.1, 5.5, and 6.0. For the latest support matrix information, see the [HPE Software Product Support Matrix](#).

This document is an overview of the features provided by HPE Cloud Optimizer. It contains important information not included in the manuals or Online Help. You can find information about the following in this document:

- [What's New in This Release?](#)
- [Support Matrix](#)
- [Installation Notes](#)
- [Defects Fixed in this Release](#)
- [Known Problems and Workarounds](#)

- [Limitations](#)
- [Documentation Updates](#)
- [Localization Support](#)
- [Open Source and Third-Party Components](#)

What's New in This Release?

Introduced in the Release

- Capabilities to monitor Guest File Systems and provide file system alerts. You can also suppress alerts based on the File System name. For more information on Alerting for vCenter, see *Alerts* section in the *HPE Cloud Optimizer Online Help*.
- Health State notifications using the Message Bus and Rest APIs for HPE CSA (4.7 and later) subscribed VMs. For more information, see the *Integrating HPE Cloud Optimizer with Other HPE Products* of the *HPE Cloud Optimizer Online Help*.
- Support for TLS (Version 1.2) communication between HPE Cloud Optimizer and KVM compute hosts. This allows enhanced security for data. For more information, see the *Adding KVM Datasource* section of the *HPE Cloud Optimizer Online Help*.
- Application Programming Interfaces (APIs):
 - Enhanced Summarized Metrics and Allocation Details of VMs, Hosts, and Clusters.
 - Health Status of a VM using Message Bus or Rest APIs.
For more information, see the *API Reference* section of the *HPE Cloud Optimizer Online Help*.

Enhancement

VM Summary page to provide VM status and Health Information for CPU and Memory in addition to the existing features. For more information, see the *Capacity* section of the *HPE Cloud Optimizer Online Help*.

Integration with other Products

- Support for HPE Helion CloudSystem 9.0
- Support for HPE Operations Bridge Reporter 10.00
- Support for HPE BSM/OMi MP for Cloud Optimizer 1.23

- Support for HPE Cloud Service Automation 4.8
- Support for HPE Service Health Reporter 9.41

Upgrade Component

HPE ComputeSensor is upgraded from Version 2.01 to 12.01.

Support Matrix

You can find the Support Matrix for this product that lists all the software and hardware requirements. The support matrix may be updated between releases, and so is only available at the HPE Support web site: [HPE Support matrices](#).

Note: Most of the support areas require that you register as an HPE Passport user and sign in. Many also require an active support contract. To find more information about support access levels, go to: [Access levels](#).

To register for an HPE Passport ID, go to: [HPE Passport Registration](#).

The support matrix includes the following information:

- **Requirements**
 - Hardware
 - Operating System
 - Databases
 - Application Servers
 - Web Browsers and Plug-ins
- **Compatibility**
 - Languages
 - Internationalization Variances
 - Virtualization Products
 - High-Availability Products
 - HPE Software Integrations

- HPE Software Coexistence
- Performance and Sizing

Installation Notes

Installation requirements, as well as instructions for installing HPE Cloud Optimizer are documented in the *HPE Cloud Optimizer Installation Guide* provided in PDF (.pdf) format. You can find the Installation Guide on the product installation media at the location - `\paperdocs\HPCO_InstallGuide.pdf`.

Note: If there is a firewall on the system where HPE Cloud Optimizer is installed, ensure that port 8081 is open to ensure that HPE Cloud Optimizer is accessible from the browser. For accessing in the HTTPS mode, port 8444 must be open. For more information on port settings, see the *HPECloud Optimizer Online Help*.

For more information on Installing HPE Cloud Optimizer, see the *HPE Cloud Optimizer Installation Guide*.

After installing HPE Cloud Optimizer, launch the user interface using the URL:
<http://<servername>:8081/PV> OR <https://<servername>:8444/PV>.

Defects Fixed in this Release

Following defects are fixed in this release:

S/I	Global ID	Summary
1.	QCCR1A188647	vPV - Hyper-V datasource Treemap issue.
2.	QCCR1A190005	Cloud Optimizer: Rest API calls does not return value for individual datastore.
3.	QCCR1A190057	Rest API calls for host does not return value for remaining capacity (VMs).
4.	QCCR1A190134	Cloud Optimizer 3.01 and HP VPV 2.20 - Capacity forecast for 30/60/90 days show incorrect data.
5.	QCCR1A190145	File ovtomcatb.out is growing fast after applying HF5 and HF6.
6.	QCCR1A188476	For VMs with multiple disks, the VMs are only listed under one datastore in Workbench and does not list all the

S/I	Global ID	Summary
		storage information in Treemap.
7.	QCCR1A190044	CSA CO SSO: Cloud Optimizer is not able to get CSA Org LDAP details after fixing existing security vulnerability in CSA.
8.	QCCR1A190149	Business groups occasionally shows 0 servers for a short time.
9.	QCCR1A189966	Cloud Optimizer monitor scripts may ignore short-term peaks or may never alert.
10.	QCCR1A190297	FSMonitor alerts are not generated when short-term peak is configured.
11.	QCCR1A189853	Cloud Optimizer Server side Request Forgery.
12.	QCCR1A189858	Cloud Optimizer External XML Entity Injection exploit.
13.	QCCR1A189856	Cloud Optimizer 3 Apache Tomcat web server (CSRF) exploit (also upgraded OvJREB as part of this).
14.	QCCR1A189740	Multiple vulnerabilities on HP vPV Virtual Appliance (SSRT - ZDI defect).
15.	QCCR1A189857	Cloud Optimizer service allows the injection of direct SQL commands.
16.	QCCR1A189500	Outdated Oracle Java Version for Cloud Optimizer 3.00.

Known Problems and Workarounds

Known Problems and Workarounds

Problem	The HPE Cloud Optimizer Node Discovery policy adds and deletes nodes from HPOM for Linux (OML) and HPE OMi server frequently.
Workaround	Update the Discovery instance deletion threshold to a higher value. The following Discovery configuration variable makes HPE Cloud Optimizer Discovery to update HPOM or HPE OMi if the data change is consistent for 12 hours. This is when Discovery runs every 30 mins.

	<pre>[agtrep] INSTANCE_DELETION_THRESHOLD=<24> Use the following command to set the value: /opt/OV/bin/ovconfchg -ns agtrep -set INSTANCE_ DELETION_THRESHOLD <24> For more information, see the KB Article KM02373991.</pre>
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<p>Problem</p>	<p>For non-English locals, when the Online Help is accessed from the HPE Cloud Optimizer user interface, the following error appears:</p> <p><i>"An error occurred while processing the request. Please try again."</i></p>
<p>Workaround</p>	<p>Follow these steps:</p> <ol style="list-style-type: none"> 1. Log on as a root user. 2. Run the command: cd /opt/OV/www/webapps/PV/html/help/<lang_code>/WebHelp/vPVHelp 3. Extract the contents of vPV.zip. 4. Run the command: cd /opt/OV/www/webapps/PV/html/help/<lang_code>/WebHelp/CSA_vPVHelp/ 5. Extract the contents of CSA_vPV_Help.zip. <p>Where <lang_code>(language code) can be : spa(spanish), deu(german), rus(russian), fra(french), kor(korean), jpn(japan) or zho(simplified chinese).</p> <p>Example:</p> <p>For Korean:</p> <ol style="list-style-type: none"> 1. Log on as a root user. 2. Run the command: cd /opt/OV/www/webapps/PV/html/help/kor/WebHelp/vPVHelp 3. Extract the contents of vPV.zip. 4. Run the command: cd /opt/OV/www/webapps/PV/html/help/kor/WebHelp/CSA_vPV_Help 5. Extract the contents of CSA_vPV_Help.zip.

Problem	When querying the performance metrics for datastore, if the value returned is larger than 32-bit, the VMware vCenter services fail.
Workaround	If you have vCenter version 5.0, you can apply the Update 1 for 5.0, which contains the fix for the issue. For more information, see the VMware vCenter Server Release Notes available at https://www.vmware.com/support/vsphere5/doc/vsp_vc50_u1_rel_notes.html#clientissues .
Problem	When a VM is on the Network File System (NFS) datastore and belongs to the Distributed Virtual Switch (DVS) port group, no data is collected. Hence, on the HPE Cloud Optimizer console, there is no data available on the Treemap.
Workaround	None
Problem	<p>Installation of HPE Operations Manager (HPOM) integration package fails on HPOM for Unix with the following error:</p> <pre>"/etc/opt/OV/share/conf/OpC/mgmt_sv/integration/cfgupld/post/cvp_upload.sh: [: not found"</pre>
Workaround	<p>Follow the steps:</p> <ol style="list-style-type: none"> 1. Log on to the node as root. 2. Go to the following locations: <pre>/etc/opt/OV/share/conf/OpC/mgmt_sv/integration/cfgupld/post/</pre> or <pre>/etc/opt/OV/share/conf/OpC/mgmt_sv/integration/cfgdwn/post/</pre> 3. Open the <code>cvp_upload.sh</code> or <code>cvp_download.sh</code> file. Replace <code>#!/bin/sh</code> with <code>#!/usr/xpg4/bin/sh</code>. 4. Save and close the file.
Problem	<p>The following metrics are not collected for Hyper- V Host, VM, or Datastore for Windows 2008 R2 SP1:</p> <p>Host Class</p> <ul style="list-style-type: none"> • CPUReadyTime • CPUPhysReadyUtil

	<p>Guest Class</p> <ul style="list-style-type: none"> • SystemOSName • MemoryDemand • CPUReadyTime • CPUUserModeUtil • CPUSysModeUtil • IPAddress <p>DataStore Class</p> <ul style="list-style-type: none"> • DiskSnapShotUsed • DiskVMDKUSed • DiskProvisioned • DiskOthersUsed <p>These metrics which are not collected cannot be used in Workbench. Also, Hyper-V (Placement and Optimization) and Forecast do not show data for these metrics.</p>
Workaround	None

Problem	Alert messages are not localized when the HPE Cloud Optimizer server locale is changed to another locale.
Workaround	<p>To display alert messages in the specified locale, follow the steps:</p> <ol style="list-style-type: none"> 1. Log on to HPE Cloud Optimizer server as root. 2. Run the following commands: <pre> ovc -kill ovc -start </pre>

Problem	When a vCenter is down and started after 15 to 20 minutes, HPE Cloud Optimizer does not collect performance data for that vCenter.
Workaround	<p>If a vCenter is down and started after 15 to 20 minutes, performance data is not collected. HPE Cloud Optimizer reports only configuration data for the vCenter. When the vCenter is up and running, HPE Cloud Optimizer will automatically re-establish the connection and collect the performance data. The collection may take some time, depending upon the configuration of the environment and its responsiveness.</p> <p>If you want to immediately restart the performance data collection, run</p>

	<p>the following command:</p> <pre>ovc -restart pvcd</pre>
Problem	If the hosts in Hyper-V domain take more time for collection than the default interval, treemap does not show correct information.
Workaround	<p>You can increase the collection interval if the hosts does not complete the collection in the default interval. To increase the collection interval, follow these steps:</p> <ol style="list-style-type: none"> 1. Open the <code>vPVWinVirtCollector.properties</code> file. 2. Update <code>CollectionIntervalInSeconds=600</code>. By default, the value is set to 300 seconds. 3. Restart the HP vPV Collector Service.
Problem	If VMware tools are not installed, HPE Cloud Optimizer does not collect the MAC address. Hence, HPE Cloud Optimizer is not able to register the details of HPE ComputeSensor running on a VM.
Workaround	Enable VMware tools for the VM in VMware vSphere Client. For more information, see the VMware documentation.
Problem	HPE Cloud Optimizer does not support some of the features when accessing with IPv6 address.
Workaround	Use the host name to access HPE Cloud Optimizer instead of IP address.
Problem	If HPE Cloud Optimizer and Service Health Reporter (SHR) are installed on same system, Service Health Reporter (SHR) does not work after uninstalling HPE Cloud Optimizer.
Workaround	Restart <code>ovtomcatB</code> using command <code>/opt/OV/bin/ovc -restart ovtomcatB</code> .
Problem	<p>The collection daemon does not start after reboot. The <code>ovc -status</code> shows <code>pvcd</code> in aborted state, after rebooting.</p> <p>OR</p> <p>Vertica Database does not start after rebooting.</p>
Workaround	If the HPE Cloud Optimizer Virtual Appliance is shutdown abruptly,

	<p>sometimes the database does not start. Due to this, <i>pvcd</i> exits on rebooting.</p> <p>Restart the <i>pv</i> process (<i>pvcd</i>, Tomcat, and Vertica) after rebooting the machine. Run the command, <code>pv restart</code> from the HPE Cloud Optimizer console.</p>
Problem	<p>When a CSA administrator reassigns a VM subscription from one user to another user, the earlier CSA user continues to see the VM name in his inventory when he logs on to HPE Cloud Optimizer.</p> <p>For example, the CSA administrator has reassigned the VM subscription from User1 to User2. User1 continues to see the VM name in his inventory when he logs on to HPE Cloud Optimizer. However, User2 is also able to view his VM subscription correctly.</p>
Workaround	<p>The CSA administrator is recommended to clear the cache using the Clear Cache button available in the CSA Integration section in the Settings > Integrations tab.</p>
Problem	<p>The Physical Server collector identifies a host as a KVM host even if the KVM hypervisor is uninstalled from the host.</p>
Workaround	<p>To resolve the issue, perform the following steps:</p> <ol style="list-style-type: none">1. Log on to the Physical Server machine.2. Go to the following location: <code>/dev/KVM</code>3. Back up a copy of the KVM folder.4. Delete the KVM folder.5. Restart the HP Compute Sensor Service.

Limitations

- The Licensed Instance Count for Physical Servers shows incorrect value in the Settings page.
- HPE Cloud Optimizer 3.01 coexists only with HPE Operations Agent 12.01. The OS drill-down on a node with HPE Operations Agent 12.01 is not supported. If you have HPOM or HPE OMi integration, you must upgrade HPE Operations Agent to 12.01.
- HPE Cloud Optimizer does not collect datastore or disk metrics for VMs and Hypervisor for the following configurations:
 - i. KVM Hypervisor is acting as compute node in OpenStack.
 - ii. VMs created on KVM Hypervisor are not under Storage pool.

- iii. The disk file name on the Storage pool is different from the VM name.
- When a target is removed from HPE Cloud Optimizer, it continues to show data for that target for three successive collection intervals. After that, no data is shown for that target and the instance count is also updated.
- HPE Cloud Optimizer Collector Service collects only Hyper-V hosts monitored by SCVMM excluding the ESX servers from collection.
- When a datastore is mounted across multiple clusters, in HPE Cloud Optimizer, the datastore is associated only with the first cluster. So, in Treemap and Workbench, you can view the details of the datastore only under the first cluster.
- Installation of the Physical Server collector is not supported on the machine where Real Time Guest OS Drill Down is configured.
- In non-root user mode Guest OS drill-down is not supported.

Documentation Updates

The first page of this release notes contains the following identifying information:

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You must have Adobe Reader installed to view files in PDF format (*.pdf). To download Adobe Reader, go to the [Adobe](#) web site.

Localization Support

HPE supplies localized software for HPE Cloud Optimizer in the following languages:

- English
- Simplified Chinese

- Japanese
- French
- Spanish
- Russian
- Korean
- German

The latest localized documentation for HPE Cloud Optimizer can be downloaded from the [SSO portal](#).

Open Source and Third-Party Components

The source code for the Open Source components for HPE Cloud Optimizer is available via request. To obtain the source code, contact HPE support.

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Feedback on Release Notes (Cloud Optimizer 3.01)

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